



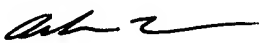
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PRE-APPEAL BRIEF REQUEST FOR REVIEW		Docket Number (Optional) 204552030600	
	Application Number 10/695,001	Filed October 29, 2003	
	First Named Inventor Nobuhiro NISHIYAMA et al.		
	Art Unit 2828	Examiner T. N. Nguyen	
<p>Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.</p> <p>This request is being filed with a notice of appeal.</p> <p>The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.</p> <p>I am the</p> <p><input type="checkbox"/> applicant /inventor.</p> <p><input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)</p> <p><input checked="" type="checkbox"/> attorney or agent of record. Registration number <u>54,217</u></p> <p><input type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34. _____</p> <p> _____ Signature</p> <p>_____ Adam Keser Typed or printed name</p> <p>_____ (703) 760-7301 Telephone number</p> <p>_____ July 9, 2007 Date</p> <p>NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.</p> <p><input type="checkbox"/> *Total of <u>1</u> forms are submitted.</p>			



Docket No. 204552030600
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Nobuhiro NISHIYAMA et al.

Application No. 10/695,001

Confirmation No. 5307

Filed: October 29, 2003

Art Unit: 2828

For: SEMICONDUCTOR LASER ASSEMBLY

Examiner: Tuan N. Nguyen

PRE-APPEAL BRIEF REQUEST FOR REVIEW

MS AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Applicants respectfully request review of the Action mailed March 9, 2007, for the reasons set forth below. Applicants are filing a Notice of Appeal concurrently herewith.

I. Lebby Does Not Disclose a Laser Diode Mounted on a Submount

Claims 1-6 stand rejected under 35 USC 102(b) on Lebby (U.S. Patent No. 5,838,703). Applicants respectfully traverse this rejection. Lebby fails to disclose "a submount mounted on the first mount surface of the substrate" and "a laser diode mounted on the submount," as recited in applicants' claim 1. While the Examiner has relied solely on Figure 1 of Lebby as disclosing these features, Figure 1 makes no such disclosure.

The Examiner has cited Figure 1 of Lebby as disclosing a substrate 13, a laser device 14 and "a submount under laser 14 mounted on first submount surface of substrate 13." Applicants respectfully disagree, Lebby discloses a single laser device 14 having two layers. Lebby does not

disclose a submount under the laser 14. Although Figure 1 of Lebby discloses a two layer structure on the chip 13, both layers (a ridge layer and an active layer) are parts of the laser 14, and are not a laser and a submount as recited in claim 1.

As disclosed in col. 3, line 23, through col. 4, line 10, of Lebby, reference numeral 14 refers to a Vertical Cavity Surface Emitting Laser (hereinafter, "VCSEL") which comprises both a ridge and an active region as shown in Figure 1 of Lebby.

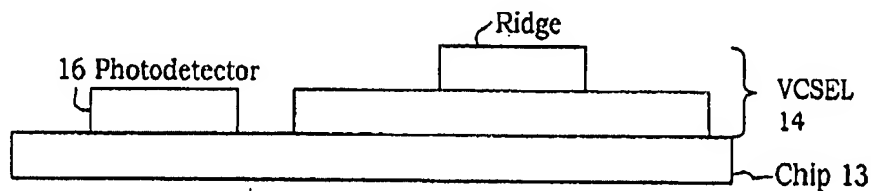
Lebby discloses the use of ridge VCSELs having a ridge layer and an active layer. At col. 3, line 55, through col. 4, line 2, the specification of Lebby states "A complete disclosure of the construction of VCSELs, such as intended for use in the present invention, and more particularly the construction of ridge VCSELs is available in U.S. Patent No. 5,256,596 entitled "Top Emitting VCSEL with Implant." Accordingly, Lebby clearly uses reference numeral 14 to identify a VCSEL having a ridge layer and an active layer, and these layers are both shown in Figures 1 and 2.

Applicants respectfully submit that the Examiner has misinterpreted the active region of the VCSEL 14 as a submount. Additional support for applicants' position can be found in Figure 2 of Lebby, which discloses a VCSEL 46 similar to that shown in Figure 1 (col. 3, lines 31 and 32 and col. 5, lines 35-41).

As shown in Figure 2, the VCSEL 46 is identified by a lead line connected to the active region of the VCSEL 46 rather than the ridge portion as in Figure 1. By identifying VCSELs 14 and 46 using lead lines pointing to the ridge portion and the active portion, respectively, Lebby implicitly indicates that both layers (the ridge layer and the active layer) are parts of the VCSEL devices. Furthermore, the specification of Lebby does not give any suggestion that the laser devices 14 and 46 are mounted on a submount. By identifying the active layer of the VCSELs 14 and 46 as submounts, the Examiner is merely highlighting his misinterpretation of Lebby.

Although, as noted by the Examiner, Figures 1 and 2 depict different embodiments with respect to the photodiodes 16 and 48, the specification of Lebby indicates that the VCSEL devices 14 and 46 are similar (col. 3, lines 31 and 32 and col. 5, lines 35-41).

To help clarify applicants' remarks, applicants have reproduced the relevant portion of Figure 1 of Lebby below, including identifiers added by applicants.



The reviewers should, therefore, find that this rejection should be withdrawn.

II. Lebby Does Not Disclose a Relay Electrode

Lebby does not disclose or suggest “a relay electrode connected to the electrode of the laser diode by a metal wire” as recited in claim 1. The Examiner has cited the “plurality of bond wire interconnects 26” which connect the VCSEL 14 and the photodetector 16 as shown in Figure 1 of Lebby and described at col. 5, lines 22-25, as disclosing this feature. However, although Lebby may disclose a metal wire, Lebby does not disclose or suggest a relay electrode connected to a wire as recited in claim 1.

The Examiner has merely asserted that VCSEL devices use relay electrodes without providing any support for the assertion or disclosure of such a feature in the cited reference.

III. Claims 7-10 Depend From Allowable Claim 1

Claims 7-10 stand rejected under 35 USC 103(a) on Lebby. As discussed above, Lebby fails to disclose or suggest both a submount and a relay electrode as recited in claim 1, which is therefore

allowable. Accordingly, claims 7-10, which depend from claim 1, are allowable due at least to their respective dependencies. The reviewers should, therefore, find that this rejection should be withdrawn.

IV. Claims 13 and 14 Depend From Allowable Claim 1

Claims 13 and 14 stand rejected under 35 USC 103(a) on Lebby in view of Applicants' Admitted Prior Art, Figure 7A (hereinafter, "AAPA"). AAPA, as shown in Figure 7A, was cited only as disclosing a metal wire attached to the substrate, and fails to overcome the deficiencies of Lebby as described above with respect to claim 1. Accordingly, claims 13 and 14, which depend from claim 1, are allowable due at least to their respective dependencies. The reviewers should, therefore, find that this rejection should be withdrawn.


V. **Conclusion**

In light of the above, the rejections of record are improper and should be withdrawn. A Notice of Allowance is solicited.

In the event the U.S. Patent and Trademark Office determines that an extension and/or other relief is required, applicants petition for any required relief, including extensions of time, and authorize the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing Docket No. **204552030600**.

Dated: July 9, 2007

Respectfully submitted,

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